

BEFORE  
THE PUBLIC SERVICE COMMISSION OF  
SOUTH CAROLINA

DOCKET NO. 2001-289-E - ORDER NO. 2001-963

SEPTEMBER 26, 2001

IN RE:	Application of South Carolina Electric & Gas Company for a Certificate of Environmental Compatibility and Public Convenience and Necessity for the Construction and Operation of the Killian 230/115kV Substation located in Columbia, South Carolina.	) ) ) ) ) ) )	ORDER GRANTING CERTIFICATE
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This matter comes before the Public Service Commission of South Carolina (the Commission) on the Application of South Carolina Electric & Gas Company (SCE&G or the Company) for a Certificate of Environmental Compatibility and Public Convenience and Necessity pursuant to the Utility Facility Siting and Environmental Protection Act (the Siting Act), S.C. Code Ann Section 58-33-10, et seq. (1976) and (Supp. 2000), for the proposed Killian 230/115 kV Substation. According to the Application, the Killian Substation is needed to support the growth in energy requirements in the Northeast Columbia area. The facility is proposed to be located on approximately five acres of property near Killian, South Carolina in Richland County.

Prior to the submission of the Application, SCE&G published notice, as required by S.C. Code Ann. Section 58-33-120 (3), of its intent to apply for a Certificate of Environmental Compatibility and Public Convenience and Necessity under the Siting Act. Proof of publication of a Notice of Filing was provided with the Application. In

addition, SCE&G provided a Certificate of Service to demonstrate compliance with S.C. Code Ann. Section 58-33-120(2).

Upon the filing of SCE&G's Application with the Commission, the Commission's Executive Director required SCE&G to publish a prepared Notice of Filing and Hearing which described the nature of the Application and advised all interested parties of the manner in which they might intervene or otherwise participate in this proceeding. SCE&G thereafter submitted affidavits of publication demonstrating compliance with the Executive Director's instructions. No Protests or Petitions to Intervene were filed.

On September 19, 2001, in accordance with S.C. Code Ann. Section 58-33-130 of the Siting Act and the Commission's Rules of Practice and Procedure, the Commission conducted an evidentiary hearing in this proceeding. SCE&G was represented by B. Craig Collins, Esquire. The Commission Staff was represented by F. David Butler, General Counsel. The statutory parties named in S.C. Code Ann. Section 58-33-140(1)(b) did not participate in the hearing.

At the hearing, SCE&G presented the testimony of Hubert C. Young, III. The Commission Staff presented the testimony of A.R. Watts.

### **SUMMARY OF TESTIMONY**

Hubert C. Young, III

SCE&G presented the testimony of Hubert C. Young, III, SCE&G's Manager of Transmission Planning. Young testified that, if approved, the new substation would be constructed near the intersection of Farrow Road and Brickyard Road in northeast

Columbia. The new substation will be called the Killian 230/115 kV Substation. The site is located adjacent to the existing Pineland to Pontiac 230 kV transmission line and will connect to this line; therefore, no new 230 kV transmission line construction is required for this project. SCE&G proposes to install in the Killian substation a 230/115 kV, 336 MVA autotransformer, two 230 kV transmission line terminals, and four 115 kV transmission line terminals.

Young stated that SCE&G subscribes to the guidelines established by the North American Electric Reliability Council (NERC), the Southeastern Electric Reliability Council (SERC), and SCE&G's Long Term Planning Criteria. A summary of these criteria is that the SCE&G Transmission System must be designed such that, during certain contingencies, only short-time overloads, low voltages, and local loss of load will occur. Young noted that after appropriate switching and re-dispatching, all non-radial loads can again be served with reasonable voltages, and all facilities can again operate within acceptable limits.

Young testified that Columbia Northeast (bounded by I-20, US-21 and SC-53) has a total customer load of approximately 130 MW. This load is served by five 115 kV distribution substations. There is an additional 80 MW of customer load between Blythewood and Winnsboro along the I-77 corridor. All of these substations and the 210 MW of customer load are served from the existing Pineland 230/115 kV substation. In the past, the plan has been that for any event in the Pineland Substation that causes the substation to fail or become unavailable, the consumer load in the Columbia Northeast area would be served by 115 kV transmission lines coming into the area from the

neighboring Denny Terrace Substation (North Columbia) and Columbia Industrial Park Substation (Southeast Columbia). These existing 115 kV transmission lines into the Columbia Northeast area have reached their capacity, and can no longer provide backup service for the entire 210 MW, according to Young. Therefore, Young believes that the new proposed Killian substation is needed. Young also stated that other alternatives were considered, and rejected. These include installing a second autotransformer in the existing Pineland Substation.

Further, an environmental study was conducted by General Engineering, a Division of General Engineering Laboratories, Inc., of Charleston, South Carolina. The study was completed on May 3, 2001. The final assessment was included in the Company's Application, and stated that the proposed substation will not result in any significant environmental impacts on land use, vegetation, wildlife, threatened and endangered species, jurisdictional wetlands, designated floodplains, or floodways. Further, no known or recorded archaeological sites were found on the proposed substation site or on the existing transmission line corridor adjacent to the proposed substation site.

Finally, Young testified that the new substation would help ensure reliability, would be in compliance with State and local laws, and its impact on the environment would be justified. The substation, according to Young, is estimated to cost approximately \$4,700,000 and is scheduled to be in service by May 2002.

A.R. Watts

The Commission Staff presented the testimony of A.R. Watts, Chief of the Electric Area of the Commission's Utilities Department. Watts provided the results of Staff's review of SCE&G's proposal in this Docket. The facility is proposed to be located on a 10.12 acre tract of land with a construction footprint of approximately five acres. The Company intends for there to be a tree and shrub buffer around the majority of the perimeter.

Watts noted that under the relevant statutory provisions, the Applicant must serve a copy of the Application on the chief executive officer of each municipality and the head of each State and local government agency charged with the duty of protecting the environment or of planning land use, in the area in the county in which any portion of the facility is to be located. A notice accompanying the application is required which specifies the date on or about which the application is to be filed. Public notice of Applicant's intent to file with the Commission shall be given in the affected areas via newspapers of general circulation. Watts stated that the Application included certification of service on the designated parties and that proof of publication of the notice was subsequently filed with the Commission. Further, Watts noted that the Applicant had complied with all statutory requirements in this matter.

Watts testified that his understanding of the need for the proposed facility is that it is intended to support the growth in energy requirements in the Northeast Columbia area.

### **FINDINGS OF FACT**

Based upon the record before it, the Commission makes the following Findings of Fact:

1. South Carolina Electric & Gas Company is engaged in the business of generating, transmitting, distributing, and selling electrical power and energy to the general public within South Carolina and is subject to the jurisdiction of this Commission.
2. SCE&G proposes to construct a new 230/115kV substation, located near Killian in Richland County, South Carolina, and will be called the Killian 230/115 kV Substation. The site is located adjacent to the existing Pineland to Pontiac 230 kV transmission line and will connect to this line; therefore, no new 230 kV transmission line construction is required for this project.
3. The proposed substation facility includes a 336 MVA transformer, metering, switching equipment, two 230 kV transmission line terminals, and four 115 kV transmission line terminals.
4. The facility is proposed to be located on a 10.12 acre tract of land with a construction footprint of approximately five acres. The Company intends for there to be a tree and shrub buffer around the majority of the perimeter. The facility is proposed to be completed and in operation by May 1, 2002.
5. The new facility is needed to provide backup for the 210 MW of customer load found in the Columbia Northeast area. The existing 115kV transmission lines running into the area have reached their capacity.

6. The environmental study that was performed shows that the proposed substation will not result in any significant environmental impacts on land use, vegetation, wildlife, threatened and endangered species, jurisdictional wetlands, designated floodplains, or floodways. Nor does the project disturb any archaeological sites.

7. The impact of the facility upon the environment is justified, considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations. There do not appear to be any acceptable alternatives to the proposal.

8. The facility will serve the interests of system economy and reliability. Clearly, the proposed substation is an economic solution to the need to back up the customer load in the Columbia Northeast area. Without the substation, the reliability of service to the customers in that area is suspect, under some circumstances.

9. It appears from the testimony that there is reasonable assurance that the proposed facility will conform to applicable State and local laws and regulations issued thereunder.

10. The public convenience and necessity require the construction of the facility.

11. SCE&G and the Commission have met all statutory requirements for notice and opportunity for hearing as required by the Siting Act.

### **CONCLUSIONS OF LAW AND DISCUSSION**

1. SCE&G has demonstrated the basis of the need for the facility. It is clear to this Commission that without the addition of this new substation the reliability of service, under certain circumstances, to the residents of Columbia Northeast becomes somewhat suspect. The addition of the substation will provide all of the necessary backup power for the area.

2. The nature of the probable environmental impact is minimal, according to the testimony of SCE&G witness Young. This testimony is backed up by a thorough analysis conducted by General Engineering. The final assessment of the study showed that the proposed substation will not result in any significant environmental impacts on land use, vegetation, wildlife, threatened and endangered species, jurisdictional wetlands, designated floodplains or floodways, or on archaeological sites.

3. The impact of the facility upon the environment is justified, considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations. SCE&G has carefully considered alternatives to building the substation, and has validly rejected those alternatives.

4. The substation will serve the interests of system economy and reliability, as discussed in Item No. 1 of this subsection of the Order.

5. There is reasonable assurance that the proposed facility will conform to applicable State and local laws and regulations issued thereunder.



6. The public convenience and necessity require the construction of the facility. As we have stated above, it appears that Columbia Northeast needs more backup power. This substation would provide that back up and ensure reliability of the system.

IT IS THEREFORE ORDERED THAT:

1. The Application of SCE&G for a Certificate of Environmental Compatibility and Public Convenience and Necessity be and hereby is approved, and accordingly, the Certificate is granted.

2. SCE&G shall notify the Commission's Executive Director of the commercial operation of the substation described in the Application within ten (10) days of such operation.

3. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

  
Chairman

ATTEST:

  
Executive Director

(SEAL)